



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification⁵ :

G09F 13/20, 13/04

A1

(11) International Publication Number:

WO 93/07605

(43) International Publication Date:

15 April 1993 (15.04.93)

(21) International Application Number: PCT/US92/08309

(22) International Filing Date: 29 September 1992 (29.09.92)

(30) Priority data:

770,996

1 October 1991 (01.10.91)

US

(71) Applicant: RITE LITE USA, INC. [US/US]; 221 North LaSalle Street, Chicago, IL 60601 (US).

(72) Inventor: HJALTASON, Thorgeir, Daniel ; Melgerdi 2603, Akureyri (IS).

(74) Agents: WATT, Phillip, H. et al.; Fitch, Even, Tabin & Flannery, Room 900, 135 South LaSalle Street, Chicago, IL 60603 (US).

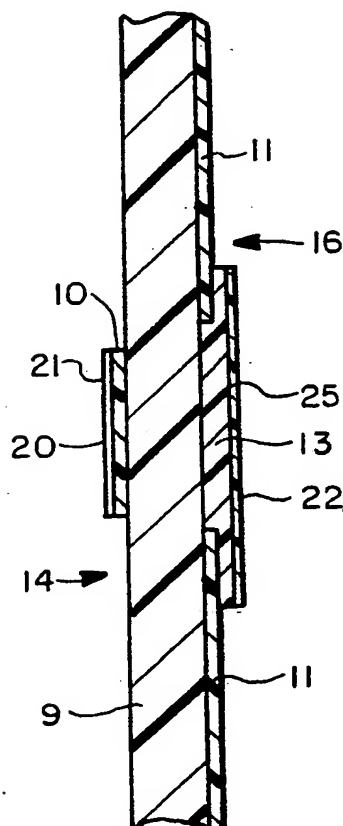
(81) Designated States: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG).

Published*With international search report.
With amended claims.*

(54) Title: SIGN PLATE FOR ILLUMINATED SIGN

(57) Abstract

A sign plate for an illuminated sign having a light source includes an opaque reflective layer (11) on its face that receives light from the light source. The opaque reflective layer (11) is broken by zones corresponding to a configuration of text, figures, and/or art design to be communicated to a viewer. The zones are covered with a light diffusion layer (25) on the side of the light source, and the surface of the sign plate facing the viewer and opposite the light source includes a layer of reflective material (10) in a corresponding configuration that is in general registered with the configuration defined by the zones and covered by the light diffusion layer on the side of the light source.



THIS PAGE IS BLANK

general register with the configuration formed as openings in said sheet of opaque reflective material.

19. A sign plate having indicia that forms visual communication matter, said sign plate being for use in a sign that has a light source for illuminating the indicia, the sign plate comprising:

light transmitting means having two opposing flat sides and forming a basic structure of the sign plate;

an opaque reflective layer on one of the two sides of said light transmitting means;

light openings in said opaque reflective layer defining the indicia;

light diffusing means on the same side of said light transmitting means as said opaque reflective layer and covering said light openings that define the indicia; and

light reflective means in the form of the defined indicia located on the other of the two sides of said light transmitting means in general alignment with said light openings, said light diffusing means generating diffused light when in the presence of the light source and projecting the diffused light through said light openings and through said light transmitting means to where at least substantial of the diffused light strikes the indicia light reflective means which reflects the light about said defined indicia and highlights said indicia.

20. A sign plate according to Claim 19, wherein the light openings in said opaque layer defining the indicia on the one side of said light transmitting means are larger than the generally aligned light reflective means formed indicia on the other side of said light transmitting means, causing the highlight about said reflective means formed indicia to include a distinct outline of the indicia created by exposed diffused light directly passing through said light

openings and passed the edges of the indicia and to include an aura about the outlines from the reflected light.

21. A sign plate according to Claim 19,
- 5 wherein the light openings in said opaque layer defining the indicia on the one side of said light transmitting means are smaller than the generally aligned light reflective means formed indicia on the other side of said light transmitting means, causing the highlight about
- 10 said reflective means formed indicia to be an aura about said indicia from the reflected light when viewed from a position generally straight in front of the light reflective means formed indicia.

1 / 3

FIG. 1
PRIOR ART

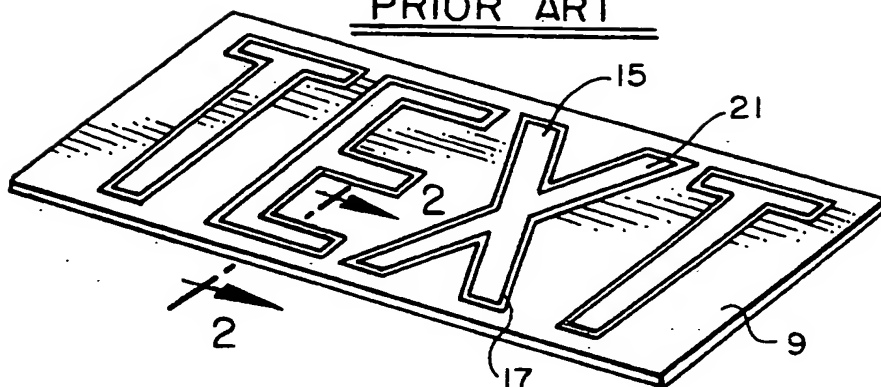


FIG. 2
PRIOR ART

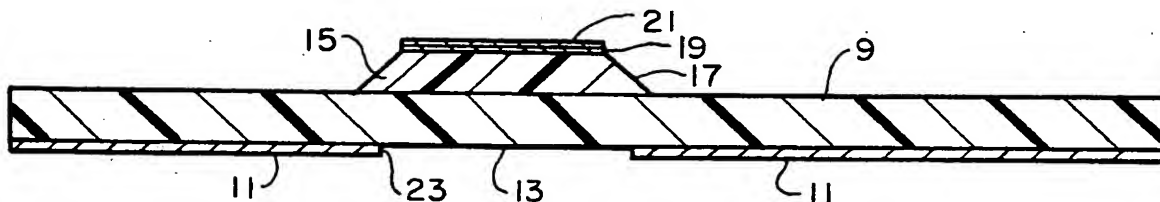
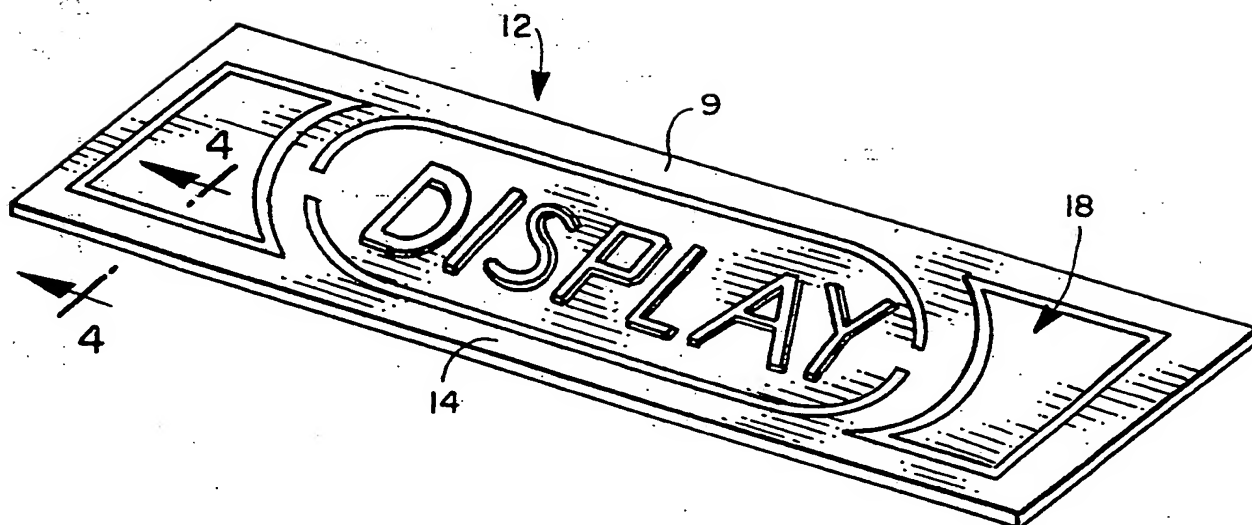


FIG. 3



SUBSTITUTE SHEET

2 / 3

FIG. 4

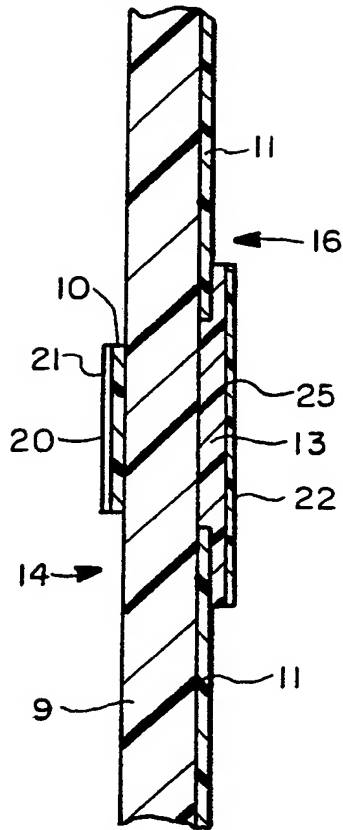


FIG. 5

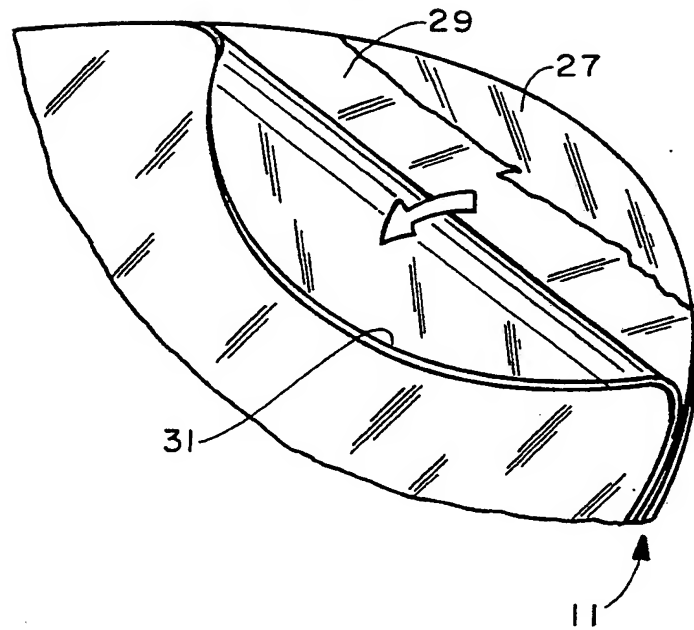


FIG. 6

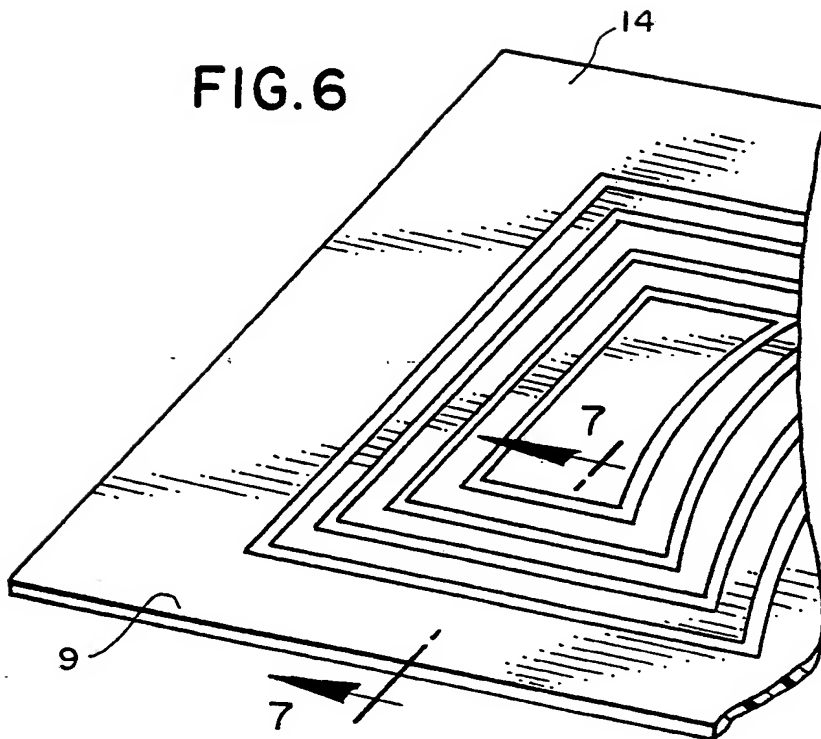
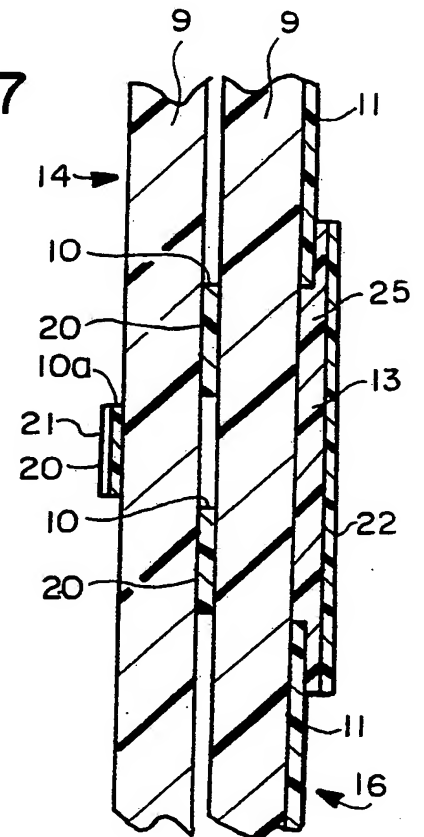
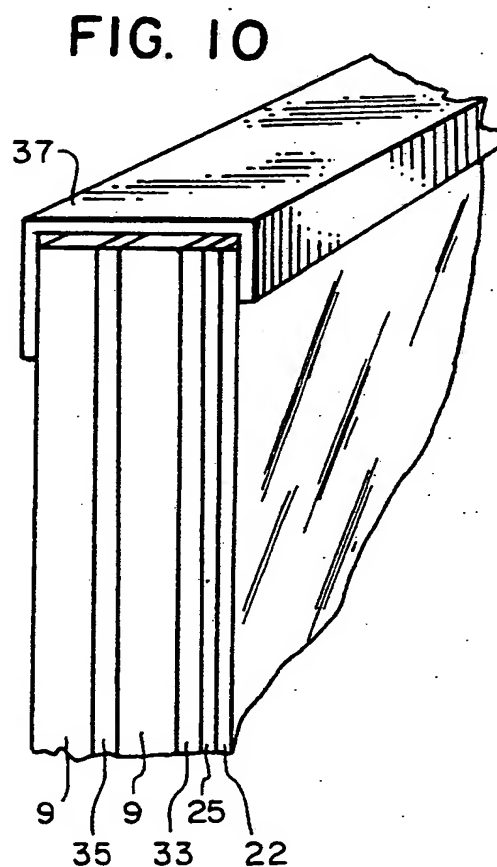
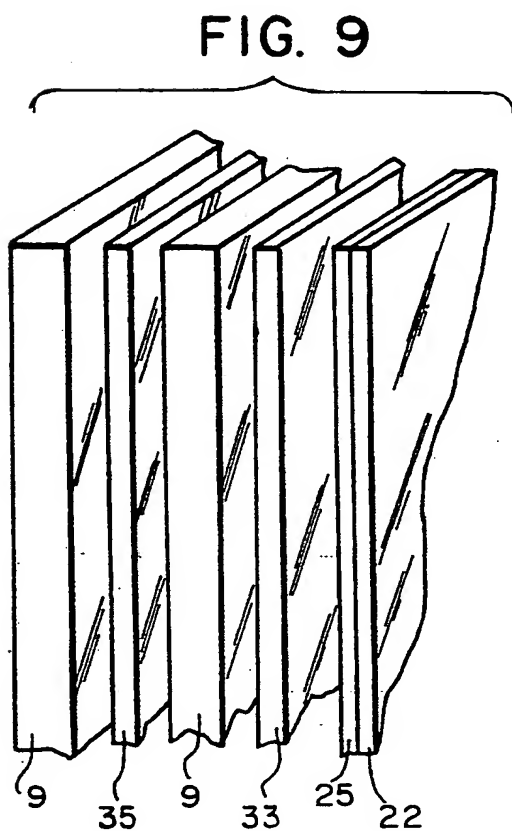
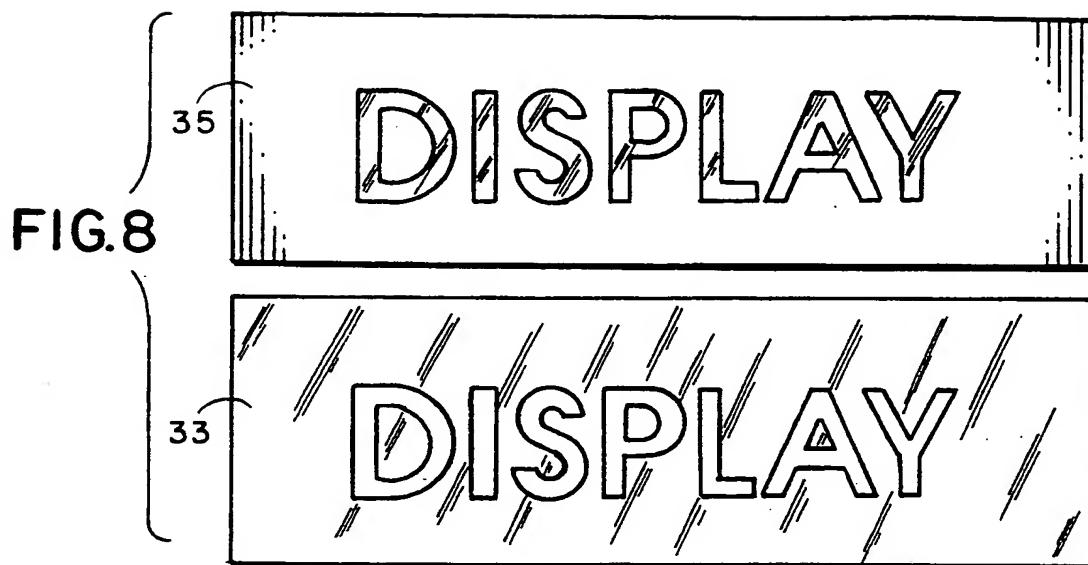


FIG. 7



SUBSTITUTE SHEET



This Page Blank (uspto)